Environmental Water Account
Strawman #2
December 3, 1998
Consultant Draft

This draft reflects what was discussed in the afternoon at the Los Angeles Airport Hilton on Wednesday, December 2. Clarifications and additional thoughts have been placed in footnotes. or in additional sections. If we have time, we will also present water supply and financial implications in this paper or at the meeting. This paper should be read in conjunction with the paper titled: *A Sample Hybrid Export Regime Designed to Allow Easy Modification: November 30, 1998*. That paper presents more detail on operational concepts and on options for tweaking he strawman. This paper is a second generation scenario and replaces the scenario in that paper.

INITIAL STARTING POINT
Assume that the following actions are being implemented:

- Accord
- VAMP
- All AFRP
- Trinity

SNAPSHOT: YEAR 1

ACTION	EWA ASSETS	WATER USER SHARE
Convert E/I Standard into water supply[1]	All benefits go to EWA	
JPOD	JPOD supplies associated with E/I elimination[2]	JPOD supplies not associated with E/I relaxation
Expand Banks to 8.5 kcfs	Expanded Banks supplies associated with E/I elimination	Expanded Banks supplies not associated with E/I elimination
200 kaf high priority, refillable storage. Initial storage = full.	Controlled by EWA[3]	
	Integrate/ coordinate ERP water purchases/ CVPIA water purchases with EWA.	

	$20 million contingency reserve[4]	
	Arrangements w/ water users for carryover of debt across water years.[5]	

SNAPSHOT: YEAR 4

Same as Year 1 with the following changes:

ACTION	EWA SHARE	WATER USER SHARE
Expand Banks to 10.3 kcfs	Expanded Banks supplies associated with E/I elimination	Expanded Banks supplies not associated with E/I elimination
200 kaf Delta island storage	Controlled by EWA[6]	
400 kaf storage south of Delta		Controlled by water users
200 kaf water purchase program	100 kaf	100 kaf
Pay for installation of 1,000,000 toilets	EWA receives water supply benefits for 10 year period.	
	Upgrade to $40 million reserve[7]	

SNAPSHOT: END OF STAGE 1

Same as Year 4 with the following changes.

ACTION	EWA SHARE	WATER USER SHARE
Enlarge Shasta	50% share new storage and power revenue	50% share new storage and power revenue
400 kaf south of Delta storage	50% share new storage	50% share new storage

Clifton Court Screens		Transfer of some EWA assets (water and/or storage) to water users.[8]
	Upgrade to $60 million reserve	

WATER QUALITY LINKAGES

Delta and export water quality is partly a function of the pattern of Delta export pumping over the year. Because the EWA would modify these export pumping patterns, it could alter Delta and export water quality. How can we factor in water quality considerations, as we implement an EWA? The following approaches comprise are one possible approach. What else could work?

- Set Delta water quality standards at levels to protect in-Delta uses. Existing standards may already accomplish this task. Then, if EWA proposes changes in operations that would require additional releases of water to maintain Delta water quality standards, EWA would be responsible for finding replacement water for the Projects.
- For exports, water quality could be factored in through incentives/disincentives. For example, if the EWA wishes to build up south of Delta supplies by pumping water during periods of low water quality, then it may be forced to relinquish a portion of its new water to the water users as compensation. Similarly, if the EWA increases pumping during periods of high water quality, the water users might reward the EWA providing extra water to the EWA. In this way, water quality considerations would be incorporated into the decisionmaking process within the EWA.

KEY POLICY/ TECHNICAL ISSUES

- What is hardwired? What is flexible? The strawman assumes that VAMP, Delta AFRP and Trinity are part of the landscape. Water users then receive a number of water supply enhancements. The net effect will look different depending upon the baseline chosen as a vantage point. An alternative would be to not hardwire VAMP and the Delta AFRP or to force the EWA to pay for these actions out of its own assets. In turn, the EWA might require a larger share of future water acquisition. The key issue, then, is not the particular sharing formulas, but whether CALFED can produce enough benefits to satisfy the various sides. The sharing formulas can then be adjusted to make the end result come out right.

- Can all of the actions presented be implemented on this timeline? What does it take to implement them? Are processes underway to assure implementation?

- Environmental benefits. User benefits tend to be defined fairly well by the average and dry year delivery values. Environmental benefits from the EWA are more difficult to quantify. The existence of environmental storage and water purchase agreements south of the Delta will allow for major modifications in export operations -- frequently no cost to the EWA (e.g., because San Luis fills). Additional analysis will be needed before the full benefits of the EWA can be

estimated.

- o The division of costs
- o Regulatory stability

NOTES

1. The proposal is for the EWA to receive a contract allocation from the projects each year, based upon some rough calculation based upon hydrology and project storage levels. Another alternative would be to retain the E/I standard, then allow the EWA to relax the standard to generate credits. This would require a daily accounting system. Both approaches appear to be possible and should be roughly equivalent.

2. That is, water moved using the JPOD above the current E/I standards would become environmental water. This could be done on a contract basis, using modeling, or using a daily accounting system (which would track the E/I ratio on a daily basis).

3. There was broad agreement at the meeting that at least some of this storage should be surface storage to allow for rapid extraction if needed.

4. One weakness with a simple contingency fund is the difficulty in turning money into environmental protection in an emergency situation. This may imply that the contingency fund should be linked to prenegotiated arrangements, such as option contracts for water, or pre negotiated penalty payments to the Projects if the EWA requires pumping reductions without the water to repay them.

5. E.g., EWA makes an agreement with the SWP or MWD to carry a loan until the following winter. If the winter is wet, the EWA loan can be repaid without the need to tap pre existing EWA assets.

6. Delta storage attached to the export pumps appears to be far more useful to the EWA as a tool to allow changes in the export pumping patterns than as a yield producing tool for the water users.

7. Export water users expressed some concern about the size of the reserve account, arguing that the entry of this much money into the water market could drive up prices for other water users.

8. This concept has received little discussion. However, if new screens significantly reduce the mortality at the export pumps, arguably the Projects should receive some of the benefits of this reduction via increased supplies, particularly if they help fund the screens.